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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,733	11/14/2001	Raymond V. Damadian	260/125	8924
7590 06/17/2004				
KAYE SCHOLER LLP 425 PARK AVENUE NEW YORK, NY 10022-3598		EXAMINER VARGAS, DIXOMARA		
		ART UNIT PAPER NUMBER		
		2859		

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/992,733	Applicant(s) DAMADIAN ET AL.	
	Examiner Dixomara Vargas	Art Unit 2859	<i>aw</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 32-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/01/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Election/Restrictions

3. Applicant's election without traverse of Group I in the reply filed on 03/18/04 is acknowledged.
4. Claims 32-64 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 03/18/04. Claims 62-64 are new-

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presented claims that belong to the nonelected inventions and therefore, claims 62-64 are withdrawn from further consideration.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

6. Claim 15 is objected to because of the following informalities: The term “boy” on line 3 of the claim is considered to be a typographical error. For examination purposes, the examiner, interpreted the recitation as “body”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 6-7, 9-14, 19-23 and 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferut et al. (US 5,432,449 A).

With respect to claim 1, Ferut discloses a test fixture for use in a magnetic resonance imaging system, comprising (Figure 1, #50): a body portion having a first longitudinal axis

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(Figure 4, #50 with axis #51); a first coil supported by the body portion (Figure 5, #68 inside #52 on Figure 4); a longitudinal member connected to the body portion (Figure 4, #52 connected to #54), the longitudinal member having a second longitudinal axis transverse to the first longitudinal axis (Figure 1); a second coil supported by the longitudinal member (Figure 4, #52a-#52c); and a container for containing a test substance (Figure 4, #55), the container being supported by the longitudinal member adjacent to the second coil (Figure 4).

9. With respect to claim 2, Ferut discloses the first coil is wound around the body portion, perpendicular to the first longitudinal axis (Figure 5, #68).

10. With respect to claims 3 and 23, Ferut discloses the test substance contained by the container, the test substance being chosen from the group consisting of petroleum jelly, water, salt water and nickel chloride (Column 4, lines 34-35).

11. With respect to claims 6, 21 and 22, Ferut discloses the container is within a region defined by the second coil (Figure 4).

12. With respect to claim 7, Ferut discloses the second coil is a transceiver (Column 3, lines 67-68; Figure 2, #52 with transceiver #32).

13. With respect to claim 9, Ferut discloses the first coil is a receiver coil (Column 3, lines 67-68; Figure 2, #52 with transceiver #32).

14. With respect to claim 10, Ferut discloses the body portion has a recessed section (Figure 4, #56); and the first coil is wound around the recessed section (Figure 5, #68).

15. With respect to claim 11, Ferut discloses the electrical connections for coupling the first and second coils to circuitry external to the test fixture (Figure 2).

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16. With respect to claim 12, Ferut discloses the body portion has an adjustable length (by adding spacer modules #58 to the coils #52) (Column 4, lines 63-68; Figure 4).

17. With respect to claim 13, Ferut discloses a telescoping section (Figure 4, #58) for adjusting the length of the body portion (Column 4, lines 63-68; Figure 4).

18. With respect to claim 14, Ferut discloses the telescoping section comprises first and second longitudinal members (Figure 4, #58 and #58a); and the second longitudinal member defines a longitudinal opening for receiving the first longitudinal member such that the second longitudinal member may be moved with respect to the first longitudinal member to vary the length of the test fixture (Column 5, lines 6-68; Figure 5, opening #92 lock with the locking mechanism #59 to couple the coil #52 to the spacer #58 in the desired arrangement).

19. With respect to claim 19, Ferut discloses a test fixture for use in a magnetic resonance imaging system (Figure 1, #50 and #52), comprising: a body portion (Figure 4, #54); a member having a first end connected to the body portion and a second end distanced from the body portion (Figure 4, #52 connected to #54 through aperture #56); and a coil (Figure 5, #64 and #68) supported by the member (Figure 5).

20. With respect to claim 20, Ferut discloses the coil is supported by the member proximate the second end of the member (Figure 5).

21. With respect to claim 25, Ferut discloses a second coil wound around the body portion (Figure 4, #52b-#52c).

22. With respect to claim 26, Ferut discloses the body portion comprises first and second members (Figure 4, #52b-#52b and #58), the first member defining an opening for slidably receiving at least a portion of the second member (Column 5, lines 6-68; Figure 5, opening #92

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lock with the locking mechanism #59 to couple the coil #52 to the spacer #58 in the desired arrangement).

23. With respect to claims 27 and 29, Ferut discloses the coil is wound around the first member (Figure 5).

24. With respect to claim 28, see rejection of claims 19-26 above.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

27. Claims 4-5, 8, 15-18, 24 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferut et al. (US 5,432,449 A) in view of Griffin et al. (US 6,512,373 B1).

With respect to claims 4, 5 and 24, Ferut discloses the claimed invention as stated above in paragraph 5 except for a longitudinal member being pivotally connected to the body portion

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about an axis perpendicular to the first longitudinal axis of the body portion, wherein the longitudinal member has a first position wherein the second longitudinal axis of the longitudinal member is parallel to the first longitudinal axis of the body portion and a second position wherein the second longitudinal axis is perpendicular to the first longitudinal axis. However, Griffin discloses a longitudinal member being pivotally connected (Figure 3, #3) to the body portion about an axis perpendicular to the first longitudinal axis of the body portion (Figure 3, #17), wherein the longitudinal member has a first position wherein the second longitudinal axis of the longitudinal member is parallel to the first longitudinal axis of the body portion and a second position wherein the second longitudinal axis is perpendicular to the first longitudinal axis (Columns 7-8, lines 43-67 and 1-2 respectively). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a longitudinal member being pivotally connected to the body portion about an axis perpendicular to the first longitudinal axis of the body portion, wherein the longitudinal member has a first position wherein the second longitudinal axis of the longitudinal member is parallel to the first longitudinal axis of the body portion and a second position wherein the second longitudinal axis is perpendicular to the first longitudinal axis as taught by Griffin with Ferut's test fixture for the purpose of imaging the sample at a desired position with respect to the field as taught by Griffin (Columns 7-8, lines 43-67 and 1-2 respectively).

28. With respect to claim 8, Ferut discloses the claimed invention as stated above in paragraph 5 except for a pivotable connector connected to an end of the body portion, the pivotable connector having an axis of rotation perpendicular to the first longitudinal axis; the pivotable connector being adapted to be connected proximate a pole of a magnetic resonance

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imaging magnet. However, Griffin discloses a pivotable connector connected to an end of the body portion (Figure 3, #4), the pivotable connector having an axis of rotation perpendicular to the first longitudinal axis; the pivotable connector being adapted to be connected proximate a pole (Figure 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a pivotable connector connected to an end of the body portion, the pivotable connector having an axis of rotation perpendicular to the first longitudinal axis; the pivotable connector being adapted to be connected proximate a pole as taught by Griffin with Ferut's test fixture for the purpose of imaging the sample at a desired position with respect to the field as taught by Griffin (Columns 7-8, lines 43-67 and 1-2 respectively).

29. With respect to claims 15, 16, see rejection of claims 4, 5, 8 and 12-14 above.

30. With respect to claim 17, Ferut discloses a container received by the second coil (Figure 4).

31. With respect to claim 18, Ferut discloses the test substance is chosen from the group consisting of petroleum jelly, water, salt water and nickel chloride (Column 4, lines 34-35).

32. With respect to claims 30, see rejection of claims 4, 5, and 28 above.

33. With respect to claim 31, Ferut discloses a container supported by the third longitudinal member within the second coil (Figure 4, #55); a test substance within the container, the test substance being capable of emitting a magnetic resonance signal (Column 4, lines 34-47).

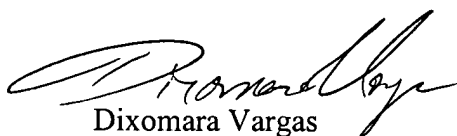
Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art cited in the PTO 892 discloses different test fixtures for MR imaging.

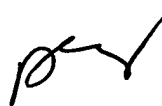
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is (571) 272-2252. The examiner can normally be reached on 8:00 am. to 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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June 10, 2004



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